

**REMARKS**

Claims 10, 15, and 18 are pending in the application.

Claims 9, 11, 13, 16, and 17 have been cancelled by this amendment. The claims 1-8, 12 and 14 have been cancelled by a prior-filed amendment.

Claim 15 has been amended merely to incorporate the elements of previously-dependent claims 9, 11, 12, 13 and 16. New claim 18 has been added. No new matter is added by these amendments. Support for these amendments is found at least in the claims 1-17 as originally filed.

The specification has been amended by substituting a new, corrected Table 1 at page 37. No new matter is added by this amendment to the specification; support is found at least at Table 1, page 37, as originally filed.

**Objection to Specification**

The Examiner has objected to the Specification because of the rectangles present in Table 1. The specification has been amended at page 37 to replace the rectangle-containing Table 1 with a corrected version of Table 1, showing the correct content of each cell. A marked up version of Table 1 showing the changes made, is attached hereto.

It is requested that the Examiner's objection be reconsidered and withdrawn.

**Rejection under 35 U.S.C. § 112 - Indefinite**

The Examiner has rejected claims 11, 16 and 17 for lack of an antecedent basis. These claims have been cancelled and their subject matter incorporated into claim 15, using language that make clearer the antecedent basis for each element.

The Examiner rejects claims 13 as being indefinite because it depends from a cancelled claim. Claim 13 has been cancelled.

In view of the foregoing, it is submitted that the Examiner's rejections under 35 U.S.C. § 112, second paragraph, for indefiniteness, are no longer applicable.

Reconsideration and withdrawal of this rejection is respectfully requested.

**Rejection under 35 U.S.C. § 102- Muroki and Anderson, Each Considered Individually**

In the Office Action, the Examiner had rejected all pending claims as being anticipated on one and/or two bases, except claim 13 (directed to an electrode(s) that has a structure that is a porous structure, a mesh structure or a brush structure), which had no prior art cited against it.

Specifically, the Examiner has rejected:

- (i) claims 9, 11 and 15-17 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 5,944,685 of Muroki and
- (ii) claims 9, 10, and 15 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,865,711 of Anderson.

The applicants respectfully traverse each of the rejections, and request that they not be applied to new claim 18.

**Muroki**

Muroki discloses skin contact type medical treatment apparatus that is a transcutaneous dosing element by which a therapeutic ionic substance is migrated from the device across the skin of a living body. The device is shown in Figure 1 of Muroki, and includes an adhesive sheet having a skin contact surface that permits adhesion of the dosage element to the skin of a living body. On the adhesive sheet is a first connective film upon which is disposed a conductive matrix. The conductive matrix is made of a conductive gel of high polymer. Layered on top of the conductive matrix is a second conductive film having a plurality of openings distributed on the surface of the conductive matrix. In addition, there is an insulating film located between the conductive matrix and the conductive film. A connection member electrically interconnects the first conductive film and the second conductive film. The connection member is seen as 5 and 5' in Figure 1B. The device of Muroki does not contain at least one electrode having a structure that is a porous structure, a mesh structure or a brush structure.

Moreover, as is shown in Figure 1B, the transcutaneous dosing element is designed to be placed in contact with and adhered to a skin surface. *In situ*, a current path exists that is a closed circuit passing through, in sequential order, the semi-conductor layer, the connection member, the metal electrode sheet (conductive layer), the conductive matrix containing gel, and the skin.

Following this pathway, the current facilitates the transcutaneous migration of the ionic drug or medicament in the gel.

Anderson

Anderson teaches an apparatus for treating waste water to remove emulsified fats, oils and greases. The apparatus includes a rectangular container that has a first anolyte zone and a second anolyte zone. In each zone is a plurality of spaced apart anodes, arranged in a specific pattern relative to one another. None of the anodes are taught as having a structure that is a porous structure, a mesh structure or a brush structure. In the operation of the waste water treatment process described in Anderson, a direct electrical current is impressed thorough the effluent.

Neither Muroki nor Anderson teaches or suggests the invention as described in claims 10, 15, or 16. As discussed in the applicants' prior response, Muroki does not include at least two electrodes contacting a liquid containing particles covered with a protein. The electrodes in the Muroki device contact a gel containing conductor matrix or skin of a living body, neither of which is a liquid. Moreover, none of the drugs or medicaments taught in Muroki is particles covered with a protein that are microorganisms or blood cell components. Finally, the electrodes of Muroki are not taught as having a porous structure, a mesh structure, or a brush structure.

The disclosure of Anderson is also deficient. First, the waste water treatment device of Anderson does not include at least two electrodes contacting a liquid containing particles covered with a protein that are microorganisms and blood cell components. The substance placed in the Anderson device for separation is waste water containing emulsified fats, oils, or greases which may include non-membrane bound proteins. Additionally, the anodes of Anderson are not taught as having a porous structure, a mesh structure or a brush structure, as are the electrodes of the invention as presently claimed.

For at least these reasons, it is respectfully submitted that the Examiner's rejections are no longer applicable. Reconsideration and withdrawal of the rejections is requested.

**CONCLUSION**

In view of the foregoing remarks, it is submitted that the claims 10, 15, and 18 are patentably distinguished over the cited art. It is requested that reconsider and allow the claims at the earliest opportunity.

Respectfully submitted,

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Enclosures - Three Month Petition for Extension of Time  
Marked Up version of Table 1

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TABLE 1

Electrode	Polarity of applied voltage - microorganism migration direction			
First electrode	[ <u>□</u> ] <u>—</u>	[ <u>□□</u> ] <u>N C</u>	[ <u>□</u> ] <u>+</u>	[ <u>□</u> ] <u>—</u>
	↓	.	.	↓
Second electrode	[ <u>□</u> ] <u>±</u>	[ <u>□</u> ] <u>—</u>	[ <u>□□</u> ] <u>N C</u>	[ <u>□</u> ] <u>±</u>
	[ <u>□</u> ] <u>—</u>	.	↓	.
Third electrode	[ <u>□□</u> ] <u>N C</u>	[ <u>□</u> ] <u>±</u>	[ <u>□</u> ] <u>—</u>	[ <u>□□</u> ] <u>N C</u>
	.	.	↓	.
Fourth electrode	[ <u>□</u> ] <u>—</u>	[ <u>□□</u> ] <u>N C</u>	[ <u>□</u> ] <u>+</u>	[ <u>□</u> ] <u>—</u>
	↓	.	.	↓

Brackets [ ] indicate deletions

Underlining \_\_\_\_\_ indicates insertions